TESTAMERICA

Analytical Data Package Prepared For

Fluor Hanford

Radiochemical Analysis By

TestAmerica TARL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 39422

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05415	I08-038	B1V6H1	J8E200194-1	KNHT01AA	9KNHT010	8148566
		B1V6B7	J8E200194-2	KNHVF1AA	9KNHVF10	8148566
	I08-037	B1V669	J8E200207-1	KNH0E1AA	9KNH0E10	8148566
		B1V668	J8E200207-2	KNH0R1AA	9KNH0R10	8148566
	W08-005	B1V8Y9	J8E200211-1	KNH1P1AC	9KNH1P10	8148565
		B1V8Y9	J8E200211-1	KNH1P2AA	9KNH1P20	8177555
		B1V833	J8E200211-2	KNH131AA	9KNH1310	8148566
		B1V8H6	J8E200211-3	KNH162AA	9KNH1620	8177555
		B1V903	J8E200211-4	KNH2A2AA	9KNH2A20	8177555
		B1V8H7	J8E200211-5	KNH2J2AA	9KNH2J20	8177555
	I08-039	B1V6P7	J8E210153-1	KNKP11AA	9KNKP110	8142640
		B1V6T9	J8E210153-2	KNKP71AA	9KNKP710	8142640
	I08-038	B1V6J3	J8E210164-1	KNKQR1AA	9KNKQR10	8148566
		B1V6J2	J8E210164-2	KNKQ31AA	9KNKQ310	8148566
	S08-005	B1V7M8	J8E210172-1	KNKRQ1AA	9KNKRQ10	8148565

Comments:

Report Nbr: 39422

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05415	S08-005	B1V7M8	J8E210172-1	KNKRQ1AC	9KNKRQ10	8148566
	S08-004	B1V295	J8E220262-1	KNPKL1AA	9KNPKL10	8143553
		B1V294	J8E220262-2	KNPKN1AA	9KNPKN10	8143553
		B1V293	J8E220262-3	KNPKP1AA	9KNPKP10	8143553
		B1V2B1	J8E220262-4	KNPKV1AA	9KNPKV10	8148562
		B1V297	J8E220262-5	KNPK11AA	9KNPK110	8148563
		B1V297	J8E220262-5	KNPK11AC	9KNPK110	8148564
		B1V298	J8E220262-6	KNPK41AA	9KNPK410	8148563
		B1V298	J8E220262-6	KNPK41AC	9KNPK410	8148564

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

June 30, 2008

Attention: Steve Trent

SAF Number	:	I08-038, I08-037, W08-005, I08-039, S08-005, S08-004
Date SDG Closed	:	May 22, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05415
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between May 19, 2008 and May 22, 2008 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1V6H1	KNHT0	5/19/08	WATER
B1V6B7	KNHVF	5/19/08	WATER
B1V669	KNH03	5/19/08	WATER
B1V668	KNHOR	5/19/08	WATER
B1V8Y9	KNH1P	5/19/08	WATER
B1V833	KNH13	5/19/08	WATER
B1V8H6	KNH16	5/19/08	WATER
B1V903	KNH2A	5/19/08	WATER
B1V8H7	KNH2J	5/19/08	WATER
B1V6P7	KNKP1	5/20/08	WATER
B1V6T9	KNKP7	5/20/08	WATER
B1V6J3	KNKQR	5/20/08	WATER
B1V6J2	KNKQ3	5/20/08	WATER

B1V7M8	KNKRQ	5/19/08	WATER
B1V2B1	KNPKV	5/22/08	WATER
B1V297	KNPK1	5/22/08	WATER
B1V298	KNPK4	5/22/08	WATER
B1V295	KNPKL	5/22/08	WATER
B1V294	KNPKN	5/22/08	WATER
B1V293	KNPKP	5/22/08	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RICH-RC-5010
Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by method RICH-RC-5078
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Plutonium-238, -239/240 by method RICH-RC-5010:
The LCS, batch blank, sample and sample duplicate (B1V2B1) results are within contractual requirements.

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1V297) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1V298) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017:
There was insufficient volume for a duplicate. Sample B1V7M8 was recounted on a different detector for the duplicate (B1V7M8 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B1TX18) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1V6H1) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by method RICH-RC-5078:
The TSIE was out of limits on the instrument therefore the data could not be calculated. The samples were shaken and recounted. The TSIE was acceptable and the results were calculated. Except as noted, the LCS, batch blank, samples, sample duplicate (B1V8Y9), and sample matrix spike (B1V8H6) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A

Batch 8142640
The LCS, batch blank, samples, sample duplicate (B1V6P7), sample matrix spike (B1V6P7), and matrix spike duplicate (B1V6P7) results are within contractual requirements.

Batch 8143553
The LCS, batch blank, samples, sample duplicate (B1V295), sample matrix spike (B1V295), and matrix spike duplicate (B1V295) results are within contractual requirements.

Fluor Hanford
June 30, 2008

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5006
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/?n), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) *u_c - Combined Uncertainty.*	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39422 File Name: h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH0E10	B1V669		MW6-SBB-A1	I08-037	W05415					05/18/2008 11:40

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	1.07E+00	pCi/L	3.8E-01	3.8E-01	U	5.50E-01	94.3	I129LL_SEP_LEPS	3.859E+00	L	06/25/2008 09:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH0R10	B1V668		MW6-SBB-A1	I08-037	W05415					05/18/2008 11:40

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	8.02E-01	pCi/L	4.1E-01	4.1E-01	U	5.61E-01	95.1	I129LL_SEP_LEPS	3.7786E+00	L	06/25/2008 09:10	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH1310	B1V833		MW6-SBB-A1	W08-005	W05415					05/18/2008 12:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	1.97E-01	pCi/L	1.6E-01	1.6E-01	U	3.31E-01	88.1	I129LL_SEP_LEPS	3.8885E+00	L	06/25/2008 09:11	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH1620	B1V8H6		MW6-SBB-A1	W08-005	W05415					06/27/2008

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8177555	TC-99	14133-76-7	-2.53E-03	pCi/g	4.4E-03	6.4E-03	U	1.06E-02	100.0	TC99_SEP_LSC	1.2501E+02	G	06/26/2008 18:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH1P10	B1V8Y9		MW6-SBB-A1	W08-005	W05415					05/18/2008 11:52

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148565	BE-7	13966-02-4	5.48E+00	pCi/L	1.6E+01	1.6E+01	U	2.99E+01		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	CO-60	10198-40-0	-1.01E+00	pCi/L	1.7E+00	1.7E+00	U	2.83E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	CS-134	13967-70-9	6.83E-01	pCi/L	1.6E+00	1.6E+00	U	3.12E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	CS-137	10045-97-3	6.00E-01	pCi/L	1.8E+00	1.8E+00	U	3.35E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	EU-152	14683-23-9	3.33E-01	pCi/L	4.0E+00	4.0E+00	U	6.95E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	EU-154	15585-10-1	4.80E+00	pCi/L	4.0E+00	4.0E+00	U	9.09E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	EU-155	14391-16-3	-2.16E+00	pCi/L	3.0E+00	3.0E+00	U	4.89E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	K-40	13966-00-2	4.17E+00	pCi/L	4.0E+01	4.0E+01	U	3.50E+01		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	RU-106	13967-48-1	5.73E+00	pCi/L	1.4E+01	1.4E+01	U	2.72E+01		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I
8148565	SB-125	14234-35-6	-3.46E+00	pCi/L	3.9E+00	3.9E+00	U	6.42E+00		GAMMALL_GS	2.0003E+00	L	06/16/2008 13:42	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

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TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39422 File Name: h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH1P20	B1V8Y9		MW6-SBB-A1	W08-005	W05415					06/27/2008

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8177555	TC-99	14133-76-7	1.31E+00	pCi/g	2.0E-02	8.5E-02		1.05E-02	100.0	TC99_SEP_LSC	1.25E+02	G	06/26/2008 16:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH2A20	B1V903		MW6-SBB-A1	W08-005	W05415					06/27/2008

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8177555	TC-99	14133-76-7	3.66E-01	pCi/g	1.1E-02	2.8E-02		1.05E-02	100.0	TC99_SEP_LSC	1.2502E+02	G	06/26/2008 20:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNH2J20	B1V8H7		MW6-SBB-A1	W08-005	W05415					06/27/2008

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8177555	TC-99	14133-76-7	7.38E-03	pCi/g	4.7E-03	7.0E-03	U	1.05E-02	100.0	TC99_SEP_LSC	1.2501E+02	G	06/26/2008 21:52	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNHT010	B1V6H1		MW6-SBB-A1	I08-038	W05415					05/18/2008 12:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	6.18E-03	pCi/L	1.4E-01	1.4E-01	U	2.55E-01	97.8	I129LL_SEP_LEPS	3.9011E+00	L	06/25/2008 07:20	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNHVF10	B1V6B7		MW6-SBB-A1	I08-038	W05415					05/18/2008 14:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	1.14E+00	pCi/L	3.0E-01	3.0E-01	U	5.36E-01	97.3	I129LL_SEP_LEPS	3.8961E+00	L	06/25/2008 07:23	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNKQ310	B1V6J2		MW6-SBB-A1	I08-038	W05415					05/19/2008 11:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	-8.42E-02	pCi/L	1.3E-01	1.3E-01	U	2.19E-01	95.1	I129LL_SEP_LEPS	3.8196E+00	L	06/25/2008 10:57	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNKQR10	B1V6J3		MW6-SBB-A1	I08-038	W05415					05/19/2008 09:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148566	I-129L	15046-84-1	-4.45E-02	pCi/L	1.7E-01	1.7E-01	U	2.98E-01	82.7	I129LL_SEP_LEPS	3.8363E+00	L	06/25/2008 10:55	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39422 File Name: h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNKRQ10	B1V7M8		MW6-SBB-A1	S08-005	W05415					05/19/2008 12:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148565	BE-7	13966-02-4	4.16E-02	pCi/L	1.8E+01	1.8E+01	U	3.14E+01		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	CO-60	10198-40-0	2.89E+01	pCi/L	6.9E+00	6.9E+00		3.60E+00		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	CS-134	13967-70-9	5.69E-01	pCi/L	2.3E+00	2.3E+00	U	4.16E+00		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	CS-137	10045-97-3	1.01E+00	pCi/L	1.7E+00	1.7E+00	U	3.23E+00		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	EU-152	14683-23-9	-9.26E-01	pCi/L	4.3E+00	4.3E+00	U	7.26E+00		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	EU-154	15585-10-1	7.46E-01	pCi/L	6.3E+00	6.3E+00	U	1.15E+01		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	EU-155	14391-16-3	1.80E+00	pCi/L	2.7E+00	2.7E+00	U	5.03E+00		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	K-40	13966-00-2	-4.57E+01	pCi/L	3.9E+01	3.9E+01	U	7.31E+01		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	RU-106	13967-48-1	-1.13E+01	pCi/L	1.7E+01	1.7E+01	U	2.76E+01		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148565	SB-125	14234-35-6	-2.09E+00	pCi/L	4.2E+00	4.2E+00	U	7.00E+00		GAMMALL_GS	2.0004E+00	L	06/16/2008 13:43	I
8148566	I-129L	15046-84-1	3.79E+00	pCi/L	6.8E-01	6.8E-01		3.80E-01	92.7	I129LL_SEP_LEPS	3.8991E+00	L	06/25/2008 10:58	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNPK110	B1V297		MW6-SBB-A1	S08-004	W05415					05/22/2008 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148563	ALPHA	12587-46-1	7.34E+00	pCi/L	2.0E+00	2.5E+00		1.39E+00	100.0	9310_ALPHABETA	2.00E-01	L	06/16/2008 21:15	I
8148564	BETA	12587-47-2	6.94E+01	pCi/L	3.9E+00	1.0E+01		2.83E+00	100.0	9310_ALPHABETA	2.002E-01	L	06/16/2008 14:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNPK410	B1V298		MW6-SBB-A1	S08-004	W05415					05/22/2008 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148563	ALPHA	12587-46-1	5.88E+00	pCi/L	1.8E+00	2.3E+00		1.47E+00	100.0	9310_ALPHABETA	2.002E-01	L	06/16/2008 21:15	I
8148564	BETA	12587-47-2	7.02E+01	pCi/L	3.9E+00	9.9E+00		2.65E+00	100.0	9310_ALPHABETA	2.001E-01	L	06/16/2008 14:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KNPKV10	B1V2B1		MW6-SBB-A1	S08-004	W05415					05/22/2008 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8148562	PU-238	13981-16-3	0.00E+00	pCi/L	1.1E-01	1.1E-01	U	2.54E-01	63.3	PUISO_PLATE_AE	2.024E-01	L	06/11/2008 14:22	I
8148562	PU-239	PU-239/240	8.22E+00	pCi/L	1.3E+00	1.8E+00		2.54E-01	63.3	PUISO_PLATE_AE	2.024E-01	L	06/11/2008 14:22	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG01AB	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148563	ALPHA	8.39E-02	pCi/L	3.1E-01	U	8.19E-01	100.0		9310_ALPHAB	2.005E-01	06/16/2008				D
BLK	12587-46-1			3.1E-01						L	21:15				

12

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

I

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG11AB	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148564	BETA	1.01E+00	pCi/L	1.3E+00	U	2.61E+00	100.0		9310_ALPHAB	2.002E-01	06/16/2008				D
BLK	12587-47-2			1.2E+00						L	14:16				

13

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, June 30, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id: KNXG21AB **Sdg/Rept Nbr:** W05415 39422 **Collection Date:** 05/19/2008 12:45

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 05/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148565	BE-7	3.25E+00	pCi/L	1.0E+01	U	1.90E+01			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	13966-02-4			1.0E+01						L	13:43				
8148565	CO-60	3.30E-01	pCi/L	1.1E+00	U	2.14E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	10198-40-0			1.1E+00						L	13:43				
8148565	CS-134	4.30E-01	pCi/L	1.0E+00	U	2.00E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	13967-70-9			1.0E+00						L	13:43				
8148565	CS-137	2.00E+00	pCi/L	1.2E+00	U	2.33E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	10045-97-3			1.2E+00						L	13:43				
8148565	EU-152	-5.83E-01	pCi/L	2.6E+00	U	4.44E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	14683-23-9			2.6E+00						L	13:43				
8148565	EU-154	3.73E-01	pCi/L	3.6E+00	U	6.77E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	15585-10-1			3.6E+00						L	13:43				
8148565	EU-155	8.82E-02	pCi/L	2.4E+00	U	4.26E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	14391-16-3			2.4E+00						L	13:43				
8148565	K-40	-9.73E+00	pCi/L	2.4E+01	U	4.63E+01			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	13966-00-2			2.4E+01						L	13:43				
8148565	RU-106	2.55E+00	pCi/L	9.3E+00	U	1.71E+01			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	13967-48-1			9.3E+00						L	13:43				
8148565	SB-125	-9.88E-02	pCi/L	2.4E+00	U	4.38E+00			GAMMALL_GS	2.0002E+00	06/16/2008				D
BLK	14234-35-6			2.4E+00						L	13:43				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG41AB	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/18/2008 12:30
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148566	I-129L	-6.57E-02	pCi/L	1.3E-01	U	2.30E-01	98.9		I129LL_SEP_L	3.9748E+00	06/25/2008				D
BLK	15046-84-1			1.3E-01						L	12:41				

15

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG82AB	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 06/27/2008
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8177555	TC-99	-2.96E-03	pCi/g	6.4E-03	U	1.07E-02	100.0		TC99_SEP_LS	1.25E+02	06/26/2008				D
BLK	14133-76-7			4.4E-03						G	22:54				

16

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXGW1AB	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148562	PU-238	-1.73E-02	pCi/L	9.0E-02	U	2.44E-01	81.3		PUISO_PLATE	2.003E-01	06/11/2008				D
BLK	13981-16-3			9.0E-02						L	14:23				
8148562	PU-239	-8.64E-03	pCi/L	8.8E-02	U	2.07E-01	81.3		PUISO_PLATE	2.003E-01	06/11/2008				D
BLK	PU-239/240			8.8E-02						L	14:23				

17

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG01CS	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148563	ALPHA	2.04E+01	pCi/L	5.1E+00		8.41E-01	100.0	2.26E+01	9310_ALPHAB	2.003E-01	06/17/2008			70	D
BS	12587-46-1			2.9E+00				90.6		L	07:05			130	

18

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id: KNXG11CS **Sdg/Rept Nbr:** W05415 39422 **Collection Date:** 05/22/2008 10:00

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148564	BETA	2.48E+01	pCi/L	3.9E+00		2.30E+00	100.0	2.27E+01	9310_ALPHAB	1.999E-01	06/16/2008			70	D
BS	12587-47-2			2.4E+00				109.4		L	14:16			130	

19

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id: KNXG21CS **Sdg/Rept Nbr:** W05415 39422 **Collection Date:** 05/19/2008 12:45

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148565	CO-60	4.09E+01	pCi/L	7.8E+00		5.07E+00		3.79E+01	GAMMALL_GS	2.0004E+00	06/16/2008			70	D
BS	10198-40-0			7.8E+00				107.8		L	13:43			130	
8148565	CS-137	5.72E+01	pCi/L	9.4E+00		4.54E+00		4.95E+01	GAMMALL_GS	2.0004E+00	06/16/2008			70	D
BS	10045-97-3			9.4E+00				115.4		L	13:43			130	
8148565	EU-152	9.00E+01	pCi/L	1.7E+01		1.16E+01		7.54E+01	GAMMALL_GS	2.0004E+00	06/16/2008			70	D
BS	14683-23-9			1.7E+01				119.4		L	13:43			130	

20

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG41CS	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/18/2008 12:30
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148566	I-129L	1.02E+01	pCi/L	1.2E+00		3.74E-01	97.1	9.81E+00	I129LL_SEP_L	3.9831E+00	06/25/2008			70	D
BS	15046-84-1			1.2E+00				103.6		L	12:43			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXG82CS	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 06/27/2008
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8177555	TC-99	5.10E-01	pCi/g	3.7E-02		1.08E-02	100.0	5.46E-01	TC99_SEP_LS	1.2501E+02	06/26/2008			70	D
BS	14133-76-7			1.3E-02				93.4		G	23:57			130	

22

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNXGW1CS	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148562	PU-239	4.57E+00	pCi/L	1.1E+00		1.99E-01	88.1	4.66E+00	PUISO_PLATE	2.0028E-01	06/11/2008			70	D
BS	PU-239/240			8.7E-01				97.9		L	14:25			130	

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TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNH1P2DR	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 06/27/2008
Client Id:	B1V8Y9	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-005	MW6-SBB-A19981								AR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8177555	TC-99	1.36E+00	pCi/g	8.8E-02		1.07E-02	100.0		TC99_SEP_LS	1.2501E+02	06/26/2008	4.0	0.9		D
DUP	14133-76-7	1.31E+00		2.1E-02						G	17:42	20.0	3		

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Monday, June 30, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNHT01CR	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/18/2008 12:30
Client Id:	B1V6H1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-038	MW6-SBB-A19981								AS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148566	I-129L	3.52E-02	pCi/L	1.5E-01	U	2.88E-01	93.2		I129LL_SEP_L	3.8888E+00	06/25/2008	140.3	0.3		D
DUP	15046-84-1	6.18E-03		1.5E-01						L	07:22	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, June 30, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNKRQ1DR	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/19/2008 12:45
Client Id:	B1V7M8	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-005	MW6-SBB-A19981								AT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148565	BE-7	-6.95E-01	pCi/L	1.7E+01	U	2.99E+01			GAMMALL_GS	2.0004E+00	06/16/2008	0.0	0.1		D
DUP	13966-02-4	4.16E-02		1.7E+01						L	17:57	20.0	3		
8148565	CO-60	3.06E+01	pCi/L	6.3E+00		2.72E+00			GAMMALL_GS	2.0004E+00	06/16/2008	5.8	0.4		D
DUP	10198-40-0	2.89E+01		6.3E+00						L	17:57	20.0	3		
8148565	CS-134	1.96E+00	pCi/L	2.1E+00	U	3.99E+00			GAMMALL_GS	2.0004E+00	06/16/2008	110.0	1.		D
DUP	13967-70-9	5.69E-01		2.1E+00						L	17:57	20.0	3		
8148565	CS-137	6.18E-01	pCi/L	1.7E+00	U	3.24E+00			GAMMALL_GS	2.0004E+00	06/16/2008	48.6	0.3		D
DUP	10045-97-3	1.01E+00		1.7E+00						L	17:57	20.0	3		
8148565	EU-152	1.39E+00	pCi/L	4.0E+00	U	7.27E+00			GAMMALL_GS	2.0004E+00	06/16/2008	1005.8	0.8		D
DUP	14683-23-9	-9.26E-01		4.0E+00						L	17:57	20.0	3		
8148565	EU-154	-1.77E+00	pCi/L	5.4E+00	U	9.57E+00			GAMMALL_GS	2.0004E+00	06/16/2008	0.0	0.7		D
DUP	15585-10-1	7.46E-01		5.4E+00						L	17:57	20.0	3		
8148565	EU-155	3.53E+00	pCi/L	3.6E+00	U	6.49E+00			GAMMALL_GS	2.0004E+00	06/16/2008	65.1	0.7		D
DUP	14391-16-3	1.80E+00		3.6E+00						L	17:57	20.0	3		
8148565	K-40	4.92E+01	pCi/L	3.4E+01		3.17E+01			GAMMALL_GS	2.0004E+00	06/16/2008	5351.6	3.9		D
DUP	13966-00-2	-4.57E+01		3.4E+01						L	17:57	20.0	3		
8148565	RU-106	-8.18E+00	pCi/L	1.5E+01	U	2.52E+01			GAMMALL_GS	2.0004E+00	06/16/2008	0.0	0.3		D
DUP	13967-48-1	-1.13E+01		1.5E+01						L	17:57	20.0	3		
8148565	SB-125	2.26E+00	pCi/L	4.1E+00	U	7.70E+00			GAMMALL_GS	2.0004E+00	06/16/2008	5241.8	1.5		D
DUP	14234-35-6	-2.09E+00		4.1E+00						L	17:57	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNPK11DR	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	B1V297	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-004	MW6-SBB-A19981								AU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148563	ALPHA	8.37E+00	pCi/L	2.8E+00		1.40E+00	100.0		9310_ALPHAB	2.001E-01	06/16/2008	13.0	0.5		D
DUP	12587-46-1	7.34E+00		2.1E+00						L	21:15	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, June 30, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNPK41DR	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	B1V298	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-004	MW6-SBB-A19981								AV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148564	BETA	6.77E+01	pCi/L	9.6E+00		2.70E+00	100.0		9310_ALPHAB	2.001E-01	06/16/2008	3.7	0.4		D
DUP	12587-47-2	7.02E+01		3.9E+00						L	14:16	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TESTAMERICA

Monday, June 30, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNPKV1CR	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 05/22/2008 10:00
Client Id:	B1V2B1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/22/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-004	MW6-SBB-A19981								AW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8148562	PU-238	0.00E+00	pCi/L	1.3E-01	U	2.98E-01	55.9		PUISO_PLATE	2.0073E-01	06/11/2008	0.0	0.		D
DUP	13981-16-3	0.00E+00		1.3E-01						L	14:23	20.0	3		
8148562	PU-239	7.53E+00	pCi/L	1.9E+00		2.98E-01	55.9		PUISO_PLATE	2.0073E-01	06/11/2008	8.9	0.5		D
DUP	PU-239/240	8.22E+00		1.4E+00						L	14:23	20.0	3		

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TESTAMERICA

Monday, June 30, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05415.Edd, h:\Reportdb\edd\FeadIV\Rad\39422.Edd

Lab Sample Id:	KNH162CW	**Sdg/Rept Nbr:**	W05415	39422	**Collection Date:** 06/27/2008
Client Id:	B1V8H6	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 05/19/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-005	MW6-SBB-A19981								AQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8177555	TC-99	3.34E+00	pCi/g	2.1E-01		1.06E-02	100.0	3.61E+00	TC99_SEP_LS	1.2501E+02	06/26/2008			60	D
MS	14133-76-7			3.2E-02				92.5		G	19:47			140	

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TESTAMERICA

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	L. Dinh
Start Date:	5/20/2008
Start Time:	
End Date:	5/20/2008
End Time	
Analyst Signature:	
Date:	5/22/08

Calibration Curve Information			
	Amount	Conc.(mg/L)	ABS.
Blank	0.000	0.000	0.000
Std. 1	0.100	0.050	0.096
Std. 2	0.500	0.250	0.483
Std. 3	0.750	0.375	0.717
Std. 4	1.500	0.750	1.402
Std 5	2.000	1.000	1.867
Standard Volume (mL):			100.000
Date of Curve:			5/20/2008

SOP Information		BATCH #	8142640
RICH-WC-5003		SDG #	W05415
Revision 7		Matrix	Water
		Instrument Information	
MDL (mg/L)	0.002	Instrument:	Hach DR2010
		Wavelength:	540
		R Squared	0.99989
		Slope:	1.86277
		Intercept:	0.00796

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-08-00099	Cr-08-00100		Cr-08-00099		Cr-08-00099	
Prep Date:	05/20/08	05/20/08		05/20/08		05/20/08	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	05/21/08	05/21/08		05/21/08		05/21/08	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.957	0.000	0.957	1	0.5095	0.509	101.90%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
KNMHW1AA	n/a	Prep Blank	100.000	-0.001		-0.001	1	<MDL	<MDL	
KNMHW1AC	n/a	LCS	100.000	0.961		0.961	1	0.5116	0.512	102.32%
KNKP11AA	B1V6P7'	Sample	100.000	0.068		0.068	1	0.0322	0.032	
KNKP11AC-S	B1V6P7'-MS	MS	100.000	0.572		0.572	1	0.3028	~~0.303~~ 0.271	102.81%
KNKP11AD-D	B1V6P7'-MSD	MSD	100.000	0.574		0.574	1	0.3039	~~0.304~~ 0.272	103.22%
KNKP11AE-X	B1V6P7'-DUP	Duplicate	100.000	0.069		0.069	1	0.0328	0.033	SRS 5/22/08
KNKP71AA	B1V6T9'	Sample	100.000	0.250		0.250	1	0.1299	0.130	
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.958		0.958	1	0.5100	0.510	102.00%
n/a	n/a	CCB	100.000	-0.002		-0.002	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	**L. Dinh**	**Calibration Curve Information**				**SOP Information**		**BATCH #**	**8143553**
Start Date:	5/22/2008		**Amount**	**Conc.(mg/L)**	**ABS.**	RICH-WC-5003		**SDG #**	**W05415**
Start Time:	1:45	**Blank**	0.000	0.000	0.000	Revision 7		**Matrix**	**Water**
End Date:	5/22/2008	**Std. 1**	0.100	0.050	0.096				
End Time	2:30	**Std. 2**	0.500	0.250	0.476			**Instrument Information**	
		Std. 3	0.750	0.375	0.712	**MDL (mg/L)**	**0.002**	Instrument:	Hach DR2010
Analyst Signature:		**Std. 4**	1.500	0.750	1.406			Wavelength:	540
		Std 5	2.000	1.000	1.847			**R Squared**	**0.99983**
Date:	5/23/08	**Standard Volume (mL):**			100.000			**Slope:**	**1.85096**
		Date of Curve:			5/22/2008			**Intercept:**	**0.00807**

	Calibration Information:	**ICV Information:**		**LCS Information:**		**Matrix Spike Information:**	
Dilution ID #	Cr-08-00103	Cr-08-00104		Cr-08-00103		Cr-08-00103	
Prep Date:	05/22/08	05/22/08		05/22/08		05/22/08	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	05/23/08	05/23/08		05/23/08		05/23/08	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	**ICV**	100.000	0.956	0.000	0.956	1	0.5121	0.512	102.43%
n/a	n/a	**ICB**	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
KNP811AA	n/a	**Prep Blank**	100.000	-0.002		-0.002	1	<MDL	<MDL	
KNP811AC	n/a	**LCS**	100.000	0.951		0.951	1	0.5094	0.509	101.89%
KNPKL1AA	B1V295'	**Sample**	100.000	0.096		0.096	1	0.0475	0.048	
KNPKL1AC-S	B1V295'-MS	**MS**	100.000	0.589		0.589	1	0.3139	~~0.314~~ 0.306	101.21%
KNPKL1AD-D	B1V295'-MSD	**MSD**	100.000	0.592		0.592	1	0.3155	~~0.315~~ 0.307	101.83%
KNPKL1AE-X	B1V295'-DUP	**Duplicate**	100.000	0.097		0.097	1	0.0480	0.048	
KNPKN1AA	B1V294'	**Sample**	100.000	0.097		0.097	1	0.0480	0.048	
KNPKP1AA	B1V293'	**Sample**	100.000	0.097		0.097	1	0.0480	0.048	
			100.000				1			
			100.000				1			
n/a	n/a	**CCV**	100.000	0.955		0.955	1	0.5116	0.512	102.32%
n/a	n/a	**CCB**	100.000	0.001		0.001	1	-0.0038	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/12/2008 11:38:18 AM

Lot No., Due Date: J8E220262; 07/07/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8148562; RPUISO Pulso by ALP

SDG, Matrix: W05415; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?			
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review John Norton **Date** 6-12-8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8148562

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	√		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	√		
3. Are the correct isotopes reported?	√		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤the Contract Detection Limit?	√		
2. Does the blank result meet the Contract criteria?	√		
3. Is the blank result < the Contract Detection Limit?	√		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			√
5. Is the LCS recovery within contract acceptance criteria?	√		
6. Is the LCS Minimum Detectable Activity ≤the Contract Detection Limit?	√		
7. Do the MS/MSD results and yields meet acceptance criteria?			√
8. Do the duplicate sample results and yields meet acceptance criteria?	√		
C. Other			
1. Are all Non-conformances included and noted?			√
2. Are all required forms filled out?	√		
3. Was the correct methodology used?	√		
4. Was transcription checked?	√		
5. Were all calculations checked at a minimum frequency?	√		
6. Were units checked?	√		

Comments on any "No" response: _____

Second Level Review: Erika Ford Date: 6/12/15

LS-038B, Rev. 10, 9/07

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/18/2008 3:34:51 PM

Lot No., Due Date: J8E220262; 07/07/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8148563; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05415; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	N/A ✓
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review John Norton **Date** 6-18-8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8148563

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erika Ford Date: 6/19/18

LS-038B, Rev. 10, 9/07

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

6/18/2008 3:33:49 PM

Lot No., Due Date: J8E220262; 07/07/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8148564; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05415; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	N/A ✓
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review John C Horton **Date** 6-18-8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8148S64

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erika Good Date: 6/19/18

LS-038B, Rev. 10, 9/07

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/19/2008 2:34:36 PM

Lot No., Due Date: J8E200211,J8E210172; 07/07/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8148565; RGAMMA Gamma by GER

SDG, Matrix: W05415; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

Sample j8e200211-1 was re-counted on a different detector to provide a duplicate sample.

First Level Review John Lostes **Date** 6-19-8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8148565

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: Insufficient volume to pour up a dup. Sample counted on different detector to act as dup.

Second Level Review: [signature] Date: 6/20/14

LS-038B, Rev. 10, 9/07

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/26/2008 3:29:56 PM

Lot No., Due Date: J8E200207,J8E200211,J8E200194,J8E210164,J8E210172; 07/07/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8148566; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05415; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓	No	N/A
3.0 QC & Samples			
3.1 Is the blank results, yield, anc MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review John Corte **Date** 6.26.8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 814856 4

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Erika Ford Date: 6/30/15

LS-038B, Rev. 10, 9/07

Lot No., Due Date: J8E200211; 07/07/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8177555; RTC99 Tc-99 by LSC
SDG, Matrix: W05415; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used.	✓		
OK			
8.01 The Appropriate Methods Were Used To Analyze the Samples	✓		
OK			
8.02 Final Results Are in the Appropriate Activity Units	✓		
OK			
8.03 Batch Contains the Required QC Appropriate for the Method	✓		
OK			
8.04 The Correct Tracer and QC Vials Where Used in the Samples	✓		
OK			
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample	✓		
OK			
8.06 At Least the Minimum Sample Volume Was Used	✓		
OK			
8.07 The Correct Count Geometry was Used.	✓		
OK			
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	✓		
OK			
8.09 Method Blank is within Control Limits.	✓		
OK			
8.1 Comments:			
8.11 Matrix Blank is within Control Limits.			✓
No Matrix Blanks (MBlks) found in Batch!			
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary).	✓		
OK			
8.13 QAS Specified Duplicate Equation Value within Control Limits.	✓		
OK (RPD)			
8.14 LCS within Control Limits.	✓		
OK			
8.15 MLCS within Control Limits.			✓
No Matrix Spikes (MLCS) found in Batch!			
8.16 MS within Control Limits.	✓		
OK			
8.17 Tracer within Control Limits.			✓
No Tracers found in Batch!			
8.18 Samples are above Minimum Tracer Yield (No Failed Samples)			✓
No Tracers found in Batch!			
8.19 Sample Specific MDC <= CRDL.	✓		
OK			
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag.			✓
No Limit Specified!			
8.22 Result < Mdc, Activity Not Detected, U Flag.	✓		
No Positive Results OK Calc_IDL Not Calculated			
8.23 Result <= Action Level, when Defined.	✓		
OK; No Action Level Found => TC-99			
OK; No Callin Level Found => TC-99			
8.24 Result + 3s >=0, Not Too Negative.	✓		
OK			
8.25 Counting Spectrum are within FWHM Limits.			✓
No FWHM found in Batch Data!			

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments: NCM 10-12593

8.31 Results Blank Subtracted as Appropriate. Yes No N/A ✓
OK

First Level Review Lisa Anderson Date 6/30/08

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-12593**
NCM Initiated By: Lisa Antonson
Date Opened: 06/30/2008
Date Closed:

Classification: **Anomaly**
Status: **QAREVIEW**
Production Area: Environmental - Sep
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J8E200211 (1,3,4,5), J8E270000 (567),
QC Batches: 8177555,

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/30/2008	The Instument blank in this Tc99 batch was out of limits on the original count. The samples were shaken well and all recounted. The TSIE was within limits and able to be calc'd.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/30/2008	The samples were recounted.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 6/30/2008

TestAmerica

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **8142640** JSE210153
Lab Sample Numbers or WC5415 Due 7/7
Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration	✓			
1. CCV analyzed at required frequency and all parameters within QC limits?				✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis				
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			✓
2. Were all sample holding times met?	✓			✓
D. QC Samples				
1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response:

Analyst: [signature] Date: 5/22/08

Second-Level Review: Sandra Leger Date: 6/30/08

TestAmerica

Richland Laboratory
Data Review Check List
Hexavalent Chromium

W05415

Batch Number(s): **8143553**

Lab Sample Numbers or JRE2202b2 Due 7/7

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration 1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration 1. CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis 1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			✓
2. Were all sample holding times met?	✓			✓
D. QC Samples 1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other 1. Are all nonconformances included and noted?	✓			–
2. Is the correct date and time of analysis shown?	✓			–
3. Did the analyst sign and date the front page of the analytical run?	✓			–
4. Correct methodology used?	✓			–
5. Transcriptions checked?	✓			–
6. Calculations checked at minimum frequency?	✓			–
7. Units checked?	✓			–

Comments on any "No" response:

Analyst: _____ Date: 5/23/08

Second-Level Review: _____ Date: 5/23/08

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E200194 W05415 Due 07.03.08

C.O.C. # **108-038-35**

Page 1 of 1

Collector Scott E. Hamaker	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. 108-038	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1, MAY 2008	HNF-N-506-13 pg 85	**Ice Chest No** GWS-008 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V6H1		W	5/18/08	1230	1x20-mL P	Activity Scan	None
B1V6H1		W	5/18/08	1230	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						RNHTC	

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Scott E. Hamaker	Scott Hamaker	Scott Hamaker	5/19/08 1200	K. B. Hulse	K. B. Hulse	K. B. Hulse	5/19/08 1200
K. B. Hulse	K. B. Hulse	K. B. Hulse	5/19/08 1345	R J R LANE	TAL		51908 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JSE200194 W05415 Due 07-03-08

C.O.C. # I08-038-7

Page 1 of 1

TESTAMERICA

Collector: Scott E. Hamaker	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
AF No.: I08-038	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1 MAY 2008	HNF-N-506-13 pg 85	Ice Chest No.: GWS-008 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V6B7		W	5/18/08	1405	1x20-mL P	Activity Scan	None
B1V6B7		W	5/18/08	1405	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KNHVF	

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Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Scott E. Hamaker	Scott E. Hamaker	5/19/08 1200	K. B. Hulse	K. B. Hulse	5/19/08 1200
K. B. Hulse	K. B. Hulse	5/19/08 1345	K R LVLANE	TAL	5/19/08 1345

Matrix *

S = Soil	DS = Drum Solid	SE = Sediment	DL = Drum Liqui
SO = Solid	T = Tissue	SL = Sludge	WI = Wipe
W = Water	L = Liquid	O = Oil	V = Vegetation
A = Air	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 51908 1345 GM Screen Result 0.1K

Client: PGW SDG #: W05415 NA[ ] SAF #: I08-038 NA [ ]

Work Order Number: J8E200194 Chain of Custody # I08-038-35,-7

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - ✓ Custody Seals
   - _____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - _____ Broken
   - _____ Leaking
   - _____ Have Air Bubbles

   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 51908

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

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FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8E200207 WO54115 Due 07-03-08	C.O.C. # I08-037-22 Page 1 of 1

Collector RM Arnold	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-037	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1 MAY 2008	1HF-N-506-12	**Ice Chest No.** GWS-008 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V669		W	5/12/08	1140	1x20-mL P	Activity Scan	None
B1V669		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KNA03	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
RM Arnold	RM Arnold	5/19/08 1200	K. B. Hulse	K. B. Hulse	5/19/08 1200
K. B. Hulse	K. B. Hulse	5/19/08 1345	LUANE TAL	LUANE TAL	51908 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JEE200207 W05415 Due 07 03 08

C.O.C. # **I08-037-21**

Page 1 of 1

Collector RM Arnold	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869	**MSIN** **FAX**
SAF No. I08-037	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**	
Project Title 2UP1, MAY 2008	HNF - N - 506 - 12	**Ice Chest No.** GW8-008	**Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**	
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**	

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V668		W	5/18/8	1140	1x20-mL P	Activity Scan	None
B1V668		W	"	"	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KNHOR	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RM Arnold		RM Arnold	5/19/08 1200	K.B. Hulse		K.B. Hulse	5-19-08 1200
K.B. Hulse		K.B. Hulse	5-19-08 1345	LJLANE		LJLANE	TAL 51908 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 51908 1345 GM Screen Result 0.1 K

Client: PGW SDG #: W05415 NA[ ] SAF #: I08-037 NA [ ]

Work Order Number: J8E200207 Chain of Custody # I08-037-22,-21

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles

   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 51908

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E200211 J8E200211 W05415 Dec 17 03 08

C.O.C. # **W08-005-56**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA MAY 2008	HNF-N-506 10	**Ice Chest No.** GWS-008 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V8Y9		W	5/8/08	1152	1x20-mL P	Activity Scan	None
B1V8Y9		W	"	"	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1V8Y9		W	"	"	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						KNAP	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	R Ellingsworth		5/19/08 1200	K. B. Hulse			5/19/08 1200
K. B. Hulse			5/19/08 1345		R.R. LANE	TAL	5/19 08 1345

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

TESTAMERICA

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E2CC211 WC5415 Due 6.03.08

C.O.C. # W08-005-310

Page 1 of 1

Collector D. Noelle	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA MAY 2008	HNF-N-366-15	**Ice Chest No.** GWS-015 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V833		W	5/8/08	1215	1x20-mL P	Activity Scan	None
B1V833		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KNH13	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Noelle			5/19/08 1200	K. B. Hulse			5/19/08 1200
K. B. Hulse			5/19/08 1345		LVLANE	TAL	51908 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liqui		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E200211 W05415 Due 6-7-08 C8

C.O.C. # **W08-005-122**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA MAY 2008	HNF-N-506 10	**Ice Chest No.** GWS-015 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V8H6		W	5-19-08	0830	1x20-mL P	Activity Scan	None
B1V8H6		W	1	0830	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						KNH16	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	Ray Ellingsworth		5/19/08 1200	K. B. Hulse			5/19/08 1200
K. B. Hulse			5/19/08 1345		WLANE	TAL	5/19/08 1345

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JJE200211 W05415 Due 07.03.08

C.O.C. # **W08-005-62**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA MAY 2008	HNF-N-506 10	**Ice Chest No.** GWS-015 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time**
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V903		W	5-18-08	1345	1x20-mL P	Activity Scan	None
B1V903		W	"	"	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						KNH2A	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	R Ellingsworth		5/19/08 1200	K.B. Hulse	K B Hulse		5/19/08 1200
K. B. Hulse	K B Hulse		5/19/08 1345		K R LILLAND	TAL	51908 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E260211 WL5415 Due 07.03.08

C.O.C. # **W08-005-123**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA MAY 2008	HNFN-506 10	**Ice Chest No.** GWS-015 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V8H7		W	5-18-08	1025	1x20-mL P	Activity Scan	None
B1V8H7		W	1	1	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						KNH2J	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
R. Ellingsworth	[signature]	5/18/08 1200	K. B. Hulse	[signature]	5/19/08 1200
K. B. Hulse	[signature]	5/19/08 1345	[signature]	WLANE TAL	51908 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 51908 1345 GM Screen Result 0.1K

Client: PAW SDG #: W05415 NA[ ] SAF #: W08-005 NA [ ]

Work Order Number: JBF200211 Chain of Custody # W08-005-56,-310,-122,-62, -123

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custocy record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles

   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

No time on COCH W08-005-62 ~~no time logged in~~. used time on sample for log in

Sample Custodian: _____ Date: 51908

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8F210153 WC5415 Due 07 04 08

C.O.C. # **108-039-3**

Page 1 of 1

Collector Roy Sickle	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
RAF No. 108-039	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title ISRM, MAY 2008		**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time**
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V6P7		W	5/20/08	0855	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
B1V6P7		W	↓	↓	1x20-mL P	Activity Scan	None
						KNKPI	

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Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Roy Sickle		MAY 20 2008 1350		LVLANE TAL	MAY 20 2008 1550
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8E210153 W05415 Due 07.04.08	C.O.C. # I08-039-36 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-039	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: ISRM, MAY 2008		Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V6T9		W	5/20/08	0949	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
B1V6T9		W	↓	0949	1x20-mL P	Activity Scan	None
						KNKPT	

63

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Roy Sickle		MAY 20 2008 1350		R.K. LANE	TAL	MAY 20 2008 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 05.30.08 1350 **GM Screen Result** 0.1K

Client: PBW **SDG #:** 405415 NA[ ] **SAF #:** I08-039 NA [ ]

Work Order Number: JBE210153 **Chain of Custody #** I08-039-3,36

Shipping Container ID: _____ **Air Bill #** _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ Tape
   _____ Custody Seals
   _____ Hazard Lables
   ✓ Appropriate Sample Lables
9. Samples are:
   ✓ In Good Condition
   _____ Broken
   _____ Leaking
   _____ Have Air Bubbles
   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ] **Amount HNO_3 Added** None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ **Date:** 05.30.08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8E210164 W5415 Due 07/04/08	C.O.C. # 108-038-45 Page 1 of 1

Collector R. ARNOLD	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. 108-038	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZP1 MAY 2008	HNF-N-506-15	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V6J3		W	5-19-08	0915	1x20-mL P	Activity Scan	None
B1V6J3		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KNKQR	

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	R. ARNOLD		52008 1350		LVLANE	TAL	52008 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S – Soil		DS – Drum Solid	
SE – Sediment		DL – Drum Liqui	
SO – Solid		T – Tissue	
SL – Sludge		WI – Wine	
W – Water		L – Liquid	
O – Oil		V – Vegetation	
A – Air		X – Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E210164 W05415 Due 17.04.08

C.O.C. # **I08-038-44**

Page 1 of 1

Collector RM Arnold	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN / FAX
SAF No. I08-038	Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title 2ZP1 MAY 2008	HAF N-506-15	Ice Chest No. 3ML 0442	Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol CERCLA	Priority: 45 Days	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V6J2		W	5-19-08	1151	1x20-mL P	Activity Scan	None
B1V6J2		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KNK43	

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Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
RM Arnold	RM Arnold	MAY 19 2008 1350	LULANE	TAL	MAY 19 2008 1350
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 05·20·08 1350 **GM Screen Result** _____

Client: PBW **SDG #:** W05415 **NA[ ] SAF #:** I08-038 **NA [ ]**

Work Order Number: JBE210164/ **Chain of Custody #** I08-038-45, 44

Shipping Container ID: _____ **Air Bill #** _____

1. Custody Seals on shipping container intact? NA [ ] Yes [/] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [/] No [ ]
3. Chain of Custody record present? NA [ ] Yes [/] No [ ]
4. Cooler Temperature: _____ NA [/] 5. Vermiculite/packing materials is NA [/] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [/] Yes [ ] No [ ]
8. Samples have:
   _____ Tape
   _____ Custody Seals
   _____ Hazard Lables
   / Appropriate Sample Lables
9. Samples are:
   / In Good Condition
   _____ Broken
   _____ Leaking
   _____ Have Air Bubbles
   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [/] pH>9 [ ] **Amount HNO_3 Added** None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [/]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ **Date:** 05·20·08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E210172 W05415 Due 07.04.08

C.O.C. # S08-005-66

Page 1 of 1

Collector R. A. Shepard	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV MAY 2008	1HNF-N-506 10	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V7M8		W	5-1-08	1245	1x20-mL P	Activity Scan	None
B1V7M8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1V7M8		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						KNKRQ	

Relinquished By	Print: R. A. Shepard	Sign	Date/Time: MAY 19 2008 1350	Received By	Print: LJLANE TAL Sign: Date/Time: MAY 19 2008 1350 5/19/08
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 05.20.08 1350 **GM Screen Result** _____

Client: PBW **SDG #:** W05415 NA[ ] **SAF #:** 508-005 NA [ ]

Work Order Number: JBE210172 **Chain of Custody #** 508-00566

Shipping Container ID: _____ **Air Bill #** _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard Lables
   - 1 Appropriate Sample Lables
9. Samples are:
   - 1 In Good Condition
   - _____ Broken
   - _____ Leaking
   - _____ Have Air Bubbles

   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] **Amount HNO_3 Added** None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [✓] No [~~✓~~]
13. Description of anomalies (include sample numbers): Samples lined ~~in~~ 05.19.08 initialed and then re-wrote 05.19.08 - Receiving Tech initialed also - these samples were relinquished and received on 05.20.08 ✓

Sample Custodian: _____ **Date:** 05.20.08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, Rev. 7, 1/08

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST JSE220262 W05415 Due 07.07.08	C.O.C. # S08-004-1055 Page 1 of 1

Collector D. R. Williamson	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2008	HNF-N-506-13	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V2B1		W	5.22.08	1000	1x20-mL P	Activity Scan	None
B1V2B1		W	↓	↓	1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
						KNPK✓	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
D. R. Williamson	Dave Williamson	MAY 22 2008 1200	S. Smith	S. Smith	MAY 22 2008 1200
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E270262 100515 Due 7.7.08

C.O.C. # **S08-004-1051**

Page 1 of 1

Collector D. R. Williamson	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2008	HNF-N-506-13	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V297		W	5.7.08	1000	1x20-mL P	Activity Scan	None
B1V297		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						KNPK1	

Relinquished By D. R. Williamson Print / Sign	Date/Time MAY 22 2008	Received By Print / Sign	Date/Time MAY 22 2008 0700
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E220262 W05415 Rec. 052208

C.O.C. # **S08-004-1052**

Page 1 of 1

Collector D. R. Williamson	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2008	HNF-N-506-13	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time**
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V298		W	5.22.08	1000	1x20-mL P	Activity Scan	None
B1V298		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						KNPRY	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. R. Williamson	D. R. Williamson		MAY 22 2008		S. Smith		MAY 22 2008 1200
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8E220262 W05415 Due 07.07.08	C.O.C. # S08-004-1049 Page 1 of 1

Collector D. R. Williamson	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2008	HNF-N-506-13	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V295		W	5.22.08	(XX)	1x20-mL P	Activity Scan	None
B1V295		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
						KNPRL	

Relinquished By D. R. Williamson Print / Sign / Date/Time MAY 22 2008	Received By Print / Sign / Date/Time MAY 22 2008	Matrix *	
Relinquished By / Date/Time	Received By / Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air	DS = Drum Solid, DL = Drum Liqu, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By / Date/Time	Received By / Date/Time		
Relinquished By / Date/Time	Received By / Date/Time		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) / Disposed By / Date/Time

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8E200762 W05415 Due 07-07-08

C.O.C. # **S08-004-1048**

Page 1 of 1

Collector D. R. Williamson	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2008	HNF-N-506-13	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V294		W	5-22-08	1000	1x20-mL P	Activity Scan	None
B1V294		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
						KNPKN	

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Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
D. R. Williamson	D. R. Williamson	MAY 22 2008	S. Smith	S. Smith	MAY 22 2008

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8E220262 W0541 5 Due 07.07.08	C.O.C. # S08-004-1047 Page 1 of 1

Collector D. R. Williamson	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2008	4NF-N-506-13	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1V293		W	5.22.08	1000	1x20-mL P	Activity Scan	None
B1V293		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
						KNPRP	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. R. Williamson	D. R. Williamson	D. R. Williamson	MAY 22 2008 800	L. Smith	L. Smith	L. Smith	MAY 22 2008 1200
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

75

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 05/22/08 12.00 GM Screen Result .07

Client: PBW SDG #: W054/15 NA[ ] SAF #: 508-004 NA [ ]

Work Order Number: JBE220262 Chain of Custody # 508-004 1049, 1047, 1048, 1055, 1051, 1052

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 6
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - _____ Broken
   - _____ Leaking
   - _____ Have Air Bubbles

   (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. Lm. Uh Date: 05.22.08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

6/9/2008 5:16:16 PM

Sample Preparation/Analysis

Balance Id:1120373922

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

6D Pu PrpRC5016, Sep~~RC5010(5039)~~ RC5036
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/07/2008

W05415

Sep1 DT/Tm Tech:

Batch: 8148562 **WATER** **pCi/L** **PM, Quote: SS , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8143553 88EA, 8148562 6DSO, 8148563 AZS7, 8148564 BCS8,

Prep Tech: ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNPKV-1-AA J8E220262-4-SAMP 05/22/2008 10:00		202.40g,in AmtRec: 20ML,LP	putc11127 05/14/08,pd 06/07/94,r #Containers: 2	200		Scr: Alpha: 4.26E-05 uCi/Sa Beta: -5.10E-05 uCi/Sa		
2 KNPKV-1-AC-X J8E220262-4-DUP 05/22/2008 10:00		200.73g,in AmtRec: 20ML,LP	putc11128 05/14/08,pd 06/07/94,r #Containers: 2	200		Scr: Alpha: 4.26E-05 uCi/Sa Beta: -5.10E-05 uCi/Sa		
3 KNXGW-1-AA-B J8E270000-562-BLK 05/22/2008 10:00		200.30g,in AmtRec:	putc11129 05/14/08,pd 06/07/94,r #Containers: 1	200		Scr: Alpha: Beta:		
4 KNXGW-1-AC-C J8E270000-562-LCS 05/22/2008 10:00		200.28g,in AmtRec:	pusg0969 05/14/08,pd 06/07/94,r #Containers: 1	200		Scr: Alpha: Beta:		

Comments: pH<2, DRM 6/9/08 RC5036, RC5038, RC5039

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNPKV1AA-SAMP Constituent List:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

KNXGW1AA-BLK:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:	UCL:	RPD:
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

KNXGW1AC-LCS:

PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20	Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20

6/9/2008 5:16:16 PM

Sample Preparation/Analysis

6D Pu PrpRC5016, SepRC5010(5039)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 07/07/2008

Sep1 DT/Tm Tech:

Batch: 8148562 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

KNPKV1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXGW1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXGW1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/12/2008 11:37:29 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/13/2007, 6/17/2008, Batch: '8148562', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
8148562					
AC		**Rev1C**	**ManisD**	6/9/2008 1:04:47 PM	
SC			wagarr	IsBatched 5/28/2008 9:05:23 AM	ICOC_RADCALC v4.8.32
SC			ManisD	InPrep 6/9/2008 1:04:47 PM	RICH-RC-5016 REV 7
SC			ManisD	InPrep2 6/9/2008 5:16:38 PM	RICH-RC-5086 REV 3
SC			ManisD	InSep1 6/10/2008 6:59:18 AM	RICH-RC-5087 REV 1
SC			AshworthA	Sep2C 6/11/2008 11:57:07 AM	RICH-RC-5039 REV5
SC			DAWKINSO	CalcC 6/11/2008 8:23:22 PM	RICH-RD-0008 REVISION 4
SC			nortonj	Rev1C 6/12/2008 11:37:21 AM	RICH-RC-0002 REV 8
AC			**ManisD**	6/9/2008 5:16:38 PM	
AC			**ManisD**	6/10/2008 6:59:18	
AC			**AshworthA**	6/11/2008 11:57:07	
AC			**DAWKINSO**	6/11/2008 8:23:22 PM	
AC			**nortonj**	6/12/2008 11:37:21	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.33

TESTAMERICA

6/12/2008 10:13:31 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: 245

AnalyDueDate: 07/07/2008 1005

Sep1 DT/Tm Tech:

Batch: 8148563 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD (Back)

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNPK1-1-AA J8E220262-5-SAMP 05/22/2008 10:00		200.00g,in AmtRec: 20ML,LP #Containers: 2		1.5	15.3	50	11A	2141	6/16/07	Scr: Alpha: 1.83E-05 uCi/Sa Beta: -9.51E-05 uCi/Sa
2 KNPK1-1-AD-X J8E220262-5-DUP 05/22/2008 10:00		200.10g,in AmtRec: 20ML,LP #Containers: 2			15.7		11B			Scr: Alpha: 1.83E-05 uCi/Sa Beta: -9.51E-05 uCi/Sa
3 KNPK4-1-AA J8E220262-6-SAMP 05/22/2008 10:00		200.20g,in AmtRec: 20ML,LP #Containers: 2			15.5		11C			Scr: Alpha: 1.20E-04 uCi/Sa Beta: -5.10E-05 uCi/Sa
4 KNXG0-1-AA-B J8E270000-563-BLK 05/22/2008 10:00		200.50g,in AmtRec: #Containers: 1			0.8		11D	b	f	Scr: Alpha: Beta:
5 KNXG0-1-AC-C J8E270000-563-LCS 05/22/2008 10:00		200.30g,in AmtRec: #Containers: 1	ASD4491 05/27/08,pd 06/01/03,r		1.1		11A	0737	6/17	Scr: Alpha: Beta:

80

Comments: pH 2.0 OK 6/12/08

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNPK1AA-SAMP Constituent List:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:

6/12/2008 10:13:33 AM

Sample Preparation/Analysis

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 07/07/2008

Sep1 DT/Tm Tech:

Batch: 8148563 **pCi/L**
SEQ Batch, Test: None

Scp2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

KNXG01AA-BLK:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:
KNXG01AC-LCS:
Am-241 RDL: pCi/L LCL:70 UCL:130 RPD:20
KNPK11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG01AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG01AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/18/2008 3:34:19 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/19/2007, 6/23/2008, Batch: '8148563', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting		Comments
8148563						
AC		Rev1C	**HarrisD**	6/12/2008 10:09:11		
SC			wagarr	IsBatched	5/28/2008 9:05:23 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	6/12/2008 10:09:11 AM	RICH-RC-5014 Revision 7
SC			HarrisD	Prep1C	6/12/2008 10:13:36 AM	RICH-RC-5014 REVISION 7
SC			BockJ	InPrep2	6/12/2008 11:53:54 AM	RICH-RC-5014 REVISION 7
SC			BockJ	Prep2C	6/16/2008 1:11:02 PM	RICH-RC-5014 REVISION 7
SC			BlackCL	InCnt1	6/16/2008 1:19:08 PM	RICH-RD-0003 REVISION 5
SC			ClarkR	CalcC	6/17/2008 8:14:14 AM	RICH-RD-0003 REVISION 5
SC			nortonj	Rev1C	6/18/2008 3:34:14 PM	RICH-RC-0002 REV 8
AC			**HarrisD**	6/12/2008 10:13:36		
AC			**BockJ**	6/12/2008 11:53:54		
AC			**BockJ**	6/16/2008 1:11:02 PM		
AC			**BlackCL**	6/16/2008 1:19:08 PM		
AC			**ClarkR**	6/17/2008 8:14:14		
AC			**nortonj**	6/18/2008 3:34:14 PM		

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

6/12/2008 10:17:10 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: 245

AnalyDueDate: 07/07/2008 W0S415

Sep1 DT/Tm Tech:

Batch: 8148564 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD (Back)

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNPK1-1-AC J8E220262-5-SAMP 05/22/2008 10:00		200.20g,in AmtRec: 20ML,LP #Containers: 2		1.5	31.6	100	26A	1505	6/16/08 S	Scr: Alpha: 1.83E-05 uCi/Sa Beta: -9.51E-05 uCi/Sa
2 KNPK4-1-AC J8E220262-6-SAMP 05/22/2008 10:00		200.10g,in AmtRec: 20ML,LP #Containers: 2			33.1		26B			Scr: Alpha: 1.20E-04 uCi/Sa Beta: -5.10E-05 uCi/Sa
3 KNPK4-1-AD-X J8E220262-6-DUP 05/22/2008 10:00		200.10g,in AmtRec: 20ML,LP #Containers: 2			32.0		26C			Scr: Alpha: 1.20E-04 uCi/Sa Beta: -5.10E-05 uCi/Sa
4 KNXG1-1-AA-B J8E270000-564-BLK 05/22/2008 10:00		200.20g,in AmtRec: #Containers: 1			0.4		26D			Scr: Alpha: Beta:
5 KNXG1-1-AC-C J8E270000-564-LCS 05/22/2008 10:00		199.90g,in AmtRec: #Containers: 1	BESB3260 05/27/08,pd 10/11/06,r		0.5		27A			Scr: Alpha: Beta:

Comments: PH 2.0 DH 6/12/08

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNPK1IAC-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:

83

TESTAMERICA

6/12/2008 10:17:11 AM

Sample Preparation/Analysis

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

AnalyDueDate: 07/07/2008

Batch: 8148564 **pCi/L**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

KNXG11AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
KNXG11AC-LCS:
Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20
KNPK11AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG11AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG11AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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6/18/2008 3:33:08 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/19/2007, 6/23/2008, Batch: '8148564', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
8148564					
AC		**Rev1C**	**HarrisD**	6/12/2008 10:14:40	
SC			wagarr	IsBatched 5/28/2008 9:05:23 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep 6/12/2008 10:14:40 AM	RICH-RC-5014 Revision 7
SC			HarrisD	Prep1C 6/12/2008 10:17:12 AM	RICH-RC-5014 REVISION 7
SC			BockJ	InPrep2 6/12/2008 11:53:59 AM	RICH-RC-5014 REVISION 7
SC			BockJ	Prep2C 6/16/2008 1:11:23 PM	RICH-RC-5014 REVISION 7
SC			BlackCL	InCnt1 6/16/2008 1:19:15 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC 6/16/2008 10:19:24 PM	RICH-RD-0003 REVISION 5
SC			nortonj	Rev1C 6/18/2008 3:33:03 PM	RICH-RC-0002 REV 8
AC			**HarrisD**	6/12/2008 10:17:12	
AC			**BockJ**	6/12/2008 11:53:59	
AC			**BockJ**	6/16/2008 1:11:23 PM	
AC			**BlackCL**	6/16/2008 1:19:15 PM	
AC			**DAWKINSO**	6/16/2008 10:19:24	
AC			**nortonj**	6/18/2008 3:33:03 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

6/10/2008 3:01:42 PM

Sample Preparation/Analysis

Balance Id:11

384868, Pacific Northwest National Laboratory .
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: ____________

AnalyDueDate: 07/02/2008 NU5415

Sep1 DT/Tm Tech:

Batch: 8148565 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD (Back)

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNH1P-1-AC J8E200211-1-SAMP 05/18/2008 11:52		2000.30g,in AmtRec: 20ML,3XLP,4LP	#Containers: 5		100.ncs	200	65 Scr:	1702 Alpha: 1.59E-04 uCi/Sa	6/10/08	Beta: -4.84E-05 uCi/Sa
2 KNKRQ-1-AA J8E210172-1-SAMP 05/19/2008 12:45		2000.40g,in AmtRec: 20ML,3X4LP	#Containers: 4				66 Scr:	1703 Alpha: 6.89E-03 uCi/Sa 3.1E-01L		Beta: 3.15E-04 uCi/Sa
3 KNKRQ-1-AD-X See comments J8E210172-1-DUP 05/19/2008 12:45		AmtRec: 20ML,3X4LP	#Containers: 4				G8 6/10/08 Scr:	2117 Alpha: 6.89E-03 uCi/Sa 3.1E-01L	6/10/08	Beta: 3.15E-04 uCi/Sa
4 KNXG2-1-AA-B J8E270000-565-BLK 05/19/2008 12:45		2000.20g,in AmtRec:	#Containers: 1				611 Scr:	1703 Alpha:	6/10/08	Beta:
5 KNXG2-1-AC-C J8E270000-565-LCS 05/19/2008 12:45		2000.40g,in AmtRec:	QCAG1480 04/23/08,pd 06/14/05,r #Containers: 1				614 Scr:	1703 Alpha:		Beta:

Comments: KNKRQ-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 6/10/08"

DLH 6/10/08 PH2O U.

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNH1P1AC-SAMP Constituent List:

TAL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 5
Prep._SamplePrep v4.8.32

TESTAMERICA

6/10/2008 3:01:43 PM

Sample Preparation/Analysis

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:11

Pipet #: _____

AnalyDueDate: 07/02/2008

Sep1 DT/Tm Tech:

Batch: 8148565 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
KNXG21AA-BLK:											
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
KNXG21AC-LCS:											
Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

KNH1P1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KNXG21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KNXG21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ **Date:** _____

087

6/19/2008 2:30:15 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/20/2007, 6/24/2008, Batch: '8148565', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
8148565					
AC	**Rev1C**	**HarrisD**	6/10/2008 2:16:53 PM		
SC		wagarr	IsBatched	5/28/2008 9:05:23 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep	6/10/2008 2:16:53 PM	RICH-RC-5014 Revision 7
SC		HarrisD	Prep1C	6/10/2008 3:01:18 PM	RICH-RC-5017 REVISION 6
SC		BockJ	InPrep2	6/12/2008 2:58:18 PM	RICH-RC-5017 REVISION 6
SC		BockJ	Prep2C	6/16/2008 1:31:31 PM	RICH-RC-5017 REVISION 6
SC		BlackCL	InCnt1	6/16/2008 1:38:58 PM	RICH-RD-0007 REVISION 6
SC		DAWKINSO	CalcC	6/16/2008 9:52:52 PM	RICH-RD-0007 REVISION 6
SC		nortonj	Rev1C	6/19/2008 2:30:09 PM	RICH-RC-0002 REV 8
AC		**HarrisD**	6/10/2008 3:01:18 PM		
AC		**BockJ**	6/12/2008 2:58:18 PM		
AC		**BockJ**	6/16/2008 1:31:31 PM		
AC		**BlackCL**	6/16/2008 1:38:58 PM		
AC		**DAWKINSO**	6/16/2008 9:52:52 PM		
AC		**nortonj**	6/19/2008 2:30:09 PM		

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

6/18/2008 10:57:12 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/02/2008 WD515

Sep1 DT/Tm Tech:

Batch: 8148566 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD,BoistedD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNHT0-1-AA J8E200194-1-SAMP 05/18/2008 12:30	3901.10g,in AmtRec: 20ML,4LP	ITA7336 06/16/08 #Containers: 3			36.2	100	L2	0900 Scr: Alpha: -1.58E-03 uCi/Sa	6/27/08 AM Beta: 2.33E-03 uCi/Sa	
2 KNHT0-1-AC-X J8E200194-1-DUP 05/18/2008 12:30	3888.80g,in AmtRec: 20ML,4LP	ITA7335 06/16/08 #Containers: 3			34.5		L4	0902 Scr: Alpha: -1.58E-03 uCi/Sa	Beta: 2.33E-03 uCi/Sa	
3 KNHVF-1-AA J8E200194-2-SAMP 05/18/2008 14:05	3896.10g,in AmtRec: 20ML,4LP	ITA7334 06/16/08 #Containers: 3			36.0		L1	0903 Scr: Alpha: 4.30E-04 uCi/Sa	Beta: -4.09E-04 uCi/Sa	
4 KNH0E-1-AA J8E200207-1-SAMP 05/18/2008 11:40	3859.00g,in AmtRec: 20ML,2X4LP	ITA7333 06/16/08 #Containers: 3			34.9		L2	1049 Scr: Alpha: 4.92E-04 uCi/Sa	6/27/08 AM Beta: 3.87E-04 uCi/Sa	
5 KNH0R-1-AA J8E200207-2-SAMP 05/18/2008 11:40	3778.60g,in AmtRec: 20ML,2X4LP	ITA7332 06/16/08 #Containers: 3			35.2		L4	1050 Scr: Alpha: 2.29E-03 uCi/Sa	Beta: 4.75E-04 uCi/Sa	
6 KNH13-1-AA J8E200211-2-SAMP 05/18/2008 12:15	3888.50g,in AmtRec: 20ML,2X4LP	ITA7341 06/16/08 #Containers: 3			32.6		L5	1051 Scr: Alpha: 1.53E-03 uCi/Sa	Beta: -1.73E-03 uCi/Sa	
7 KNKQR-1-AA J8E210164-1-SAMP 05/19/2008 09:15	3836.30g,in AmtRec: 20ML,2X4LP	ITA7340 06/16/08 #Containers: 3			30.6		L2	1235 Scr: Alpha: -2.77E-04 uCi/Sa	6/25/08 AM Beta: 1.36E-03 uCi/Sa	

TESTAMERICA

6/18/2008 10:57:13 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/02/2008

Sep1 DT/Tm Tech:

Batch: 8148566 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KNKQ3-1-AA J8E210164-2-SAMP 05/19/2008 11:51		3819.60g,in AmtRec: 20ML,2X4LP	ITA7339 06/16/08 #Containers: 3		35.2	100	L4	1287	6/25/08 PK Scr: Alpha: -9.31E-04 uCi/Sa Beta: -2.32E-04 uCi/Sa	
9 KNKRQ-1-AC J8E210172-1-SAMP 05/19/2008 12:45		3899.10g,in AmtRec: 20ML,3X4LP	ITA7338 06/16/08 #Containers: 4		34.3		L5	1238 Scr: Alpha: 6.89E-03 uCi/Sa 3.1E-01L	Beta: 3.15E-04 uCi/Sa	
10 KNXG4-1-AA-B J8E270000-566-BLK 05/18/2008 12:30		3974.80g,in AmtRec:	ITA7337 06/16/08 #Containers: 1		36.6		L2	1421 Scr: Alpha:	6/25/08 PK Beta:	
11 KNXG4-1-AC-C J8E270000-566-LCS 05/18/2008 12:30		3983.10g,in AmtRec:	ISD0863 06/16/08 #Containers: 1		36.8		L4	1423 Scr: Alpha:	Beta:	

Comments: KNKRQ-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 6/10/08"

DLH 6/18/08

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNHT01AA-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KNXG41AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KNXG41AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

KNHT01AA-SAMP Calc Info:

6/18/2008 10:57:13 AM

Sample Preparation/Analysis

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 07/02/2008

Sep1 DT/Tm Tech:

Batch: 8148566 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KNXG41AA-BLK:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KNXG41AC-LCS:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/26/2008 3:29:07 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/27/2007, 7/1/2008, Batch: '8148566', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting		Comments
8148566						
AC			**Rev1C**	**HarrisD**	6/18/2008 10:42:45	
SC				wagarr IsBatched	5/28/2008 9:05:23 AM	ICOC_RADCALC v4.8.32
SC				HarrisD InPrep	6/18/2008 10:42:45 AM	RICH-RC-5021 Revision 5
SC				HarrisD Prep1C	6/18/2008 10:56:58 AM	RICH-RC-5017 REVISION 6
SC				BostedD InPrep2	6/18/2008 1:40:51 PM	RICHRC5025 REVISION 4
SC				BostedD Prep2C	6/25/2008 7:14:25 AM	RL-GAM-002 REVISION 0
SC				BlackCL InCnt1	6/25/2008 7:17:20 AM	RL-CI-007 REVISION 0
SC				DAWKINSO CalcC	6/25/2008 5:01:25 PM	RL-CI-007 REVISION 0
SC				nortonj Rev1C	6/26/2008 3:29:02 PM	RICH-RC-0002 REV 8
AC				**HarrisD**	6/18/2008 10:56:58	
AC				**BostedD**	6/18/2008 1:40:51 PM	
AC				**BostedD**	6/25/2008 7:14:25	
AC				**BlackCL**	6/25/2008 7:17:20	
AC				**DAWKINSO**	6/25/2008 5:01:25 PM	
AC				**nortonj**	6/26/2008 3:29:02 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

RE-COUNT REQUEST

DUE DATE 7/7/08

CUSTOMER PGW

ANALAYSIS TC99

MATRIX Water

LOT NUMBER J8E200211

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 8148567

NEW BATCH NUMBER 8177555

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) All		TSE outg limits. BN
2)		Please Share well +
3)		Uncount.
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		

RC-126, 12/07, Rev 5

5/25/2008 4:30:38 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/02/2008

Batch: 8177555 **WATER** **pCi/L** **PM, Quote: SS , 57671**

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KNH1P-2-AA J8E200211-1-SAMP 05/18/2008 11:52	AmtRec: 20ML,3XLP,4LP	#Containers: 5		60		Scr:	Alpha: 1.59E-04 uCi/Sa	Beta: -4.84E-05 uCi/Sa
2 KNH1P-2-AD-X J8E200211-1-DUP 05/18/2008 11:52	AmtRec: 20ML,3XLP,4LP	#Containers: 5				Scr:	Alpha: 1.59E-04 uCi/Sa	Beta: -4.84E-05 uCi/Sa
3 KNH16-2-AA J8E200211-3-SAMP 05/18/2008 08:30	AmtRec: 20ML,3XLP	#Containers: 4				Scr:	Alpha: 9.82E-05 uCi/Sa	Beta: 4.10E-04 uCi/Sa
4 KNH16-2-AC-S J8E200211-3-MS 05/18/2008 08:30	AmtRec: 20ML,3XLP	#Containers: 4				Scr:	Alpha: 9.82E-05 uCi/Sa	Beta: 4.10E-04 uCi/Sa
5 KNH2A-2-AA J8E200211-4-SAMP 05/18/2008 13:45	AmtRec: 20ML,3XLP	#Containers: 4				Scr:	Alpha: -1.47E-04 uCi/Sa	Beta: 1.45E-04 uCi/Sa
6 KNH2J-2-AA J8E200211-5-SAMP 05/18/2008 10:25	AmtRec: 20ML,3XLP	#Containers: 4				Scr:	Alpha: 3.63E-04 uCi/Sa	Beta: -5.84E-04 uCi/Sa
7 KNXG8-2-AA-B J8E270000-567-BLK 05/18/2008 11:52	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Sample Preparation/Analysis

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/02/2008

Batch: 8177555 **pCi/L**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KNXG8-2-AC-C				60				
J8E270000-567-LCS								
05/18/2008 11:52	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
9 KNXG8-2-AD-B								
J8E270000-567-BLK								
05/18/2008 11:52	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments: KM95C-SAMP "Comments Sr-Longer count, due to low yields drm 6/9/08"

95

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNH1P2AA-SAMP Constituent List:

KNH162AC-MS:

KNXG82AA-BLK:

KNXG82AC-LCS:

KNXG82AD-BLK:

KNH1P2AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNH162AC-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG82AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG82AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNXG82AD-BLK:

Sample Preparation/Analysis

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/02/2008

Batch: 8177555 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/30/2008 11:40 55 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/1/2007, 7/5/2008, Batch: '8177555', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
8177555					
AC		**Rev1C**	**BlackCL**	6/26/2008 9:51:13	
SC			BlackCL	InCnt1	6/26/2008 9:51:13 AM	RL-CI-005 REVISION 0
SC			ClarkR	CalcC	6/27/2008 8:39:57 AM	RL-CI-005 REVISION 0
SC			antonsonl	Rev1C	6/30/2008 11:40:46 AM	RICH-RC-0002 REV 8
AC			**ClarkR**	6/27/2008 8:39:57	
AC			**antonsonl**	6/30/2008 11:40:46	

AC: Accepting Entry; SC: Status Change

TESTAMERICA

5/22/2008 8:26:37 AM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)

Pipet #:

AnalyDueDate: 07/04/2008

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8142640 WATER mg/L
SEQ Batch, Test: None All Tests: 8142640 88EA,

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

1 KNKP1-1-AA

J8E210153-1-SAMP

05/20/2008 08:55 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

2 KNKP1-1-AC-S

J8E210153-1-MS

05/20/2008 08:55 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

3 KNKP1-1-AD-D

J8E210153-1-MSD

05/20/2008 08:55 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

4 KNKP1-1-AE-X

J8E210153-1-DUP

05/20/2008 08:55 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

5 KNKP7-1-AA

J8E210153-2-SAMP

05/20/2008 09:49 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

6 KNMHW-1-AA-B

J8E210000-640-BLK

05/20/2008 08:55 AmtRec: #Containers: 1 Scr: Alpha: Beta:

7 KNMHW-1-AC-C

J8E210000-640-LCS

05/20/2008 08:55 AmtRec: #Containers: 1 Scr: Alpha: Beta:

TESTAMERICA

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/04/2008

Batch: 8142640 mg/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNKP11AA-SAMP Constituent List:

KNKP11AC-MS Constituent List:

KNKP11AD-MSD:

KNMHW1AA-BLK:

KNMHW1AC-LCS:

KNKP11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNKP11AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNKP11AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNMHW1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNMHW1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

TESTAMERICA

5/22/2008 4:08:47 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

AnalyDueDate: 07/07/2008

Batch: 8143553 **WATER** **mg/L**
SEQ Batch, Test: None

PM, Quote: SS , 57671

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

1 KNPKL-1-AA

J8E220262-1-SAMP

05/22/2008 10:00 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

2 KNPKN-1-AA

J8E220262-2-SAMP

05/22/2008 10:00 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

3 KNPKP-1-AA

J8E220262-3-SAMP

05/22/2008 10:00 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

4 KNPKP-1-AC-S

J8E220262-3-MS

05/22/2008 10:00 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

5 KNPKP-1-AD-D

J8E220262-3-MSD

05/22/2008 10:00 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

6 KNPKP-1-AE-X

J8E220262-3-DUP

05/22/2008 10:00 AmtRec: 20ML,500G #Containers: 2 Scr: Alpha: Beta:

7 KNP81-1-AA-B

J8E220000-553-BLK

05/22/2008 10:00 AmtRec: #Containers: 1 Scr: Alpha: Beta:

TESTAMERICA

101

5/22/2008 4:08:48 PM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:

AnalyDueDate: 07/07/2008

Batch: 8143553 **mg/L**
SEQ Batch, Test: None

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KNP81-1-AC-C J8E220000-553-LCS 05/22/2008 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671

KNPKL1AA-SAMP Constituent List:

KNPKP1AC-MS:

KNPKP1AD-MSD:

KNP811AA-BLK:

KNP811AC-LCS:

KNPKL1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNPKP1AC-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNPKP1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNP811AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KNP811AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ **Date:** _____